



MARK B HORTON, MD, MSPH
Director

State of California—Health and Human Services Agency
California Department of Public Health



ARNOLD SCHWARZENEGGER
Governor

September 14, 2009

Ms. Carrie Hyke
Land Use Services Department
San Bernardino County
385 North Arrowhead Avenue
San Bernardino, CA 92415-0182

Dear Ms. Hyke:

The Environmental Health Investigations Branch, Site Assessment Section (SAS), of the California Department of Public Health (CDPH), has been contacted by a community member regarding public health concerns about the Nursery Products LLC Hawes Composting Facility. The Nursery Products LLC Hawes is proposing to build and operate a composting facility 8 miles west of Hinkley, in San Bernardino County. The purpose of this letter is to provide comments on the Draft Supplemental Environmental Impact Report (SEIR), prepared for the County of San Bernardino, by PBS&J (cover dated July 2009). The SEIR is a supplement to the Draft Environmental Impact Report (DEIR) for the Nursery Products LLC Hawes Composting Facility released in September 2006. SAS works under a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR).

The focus of the SEIR was to provide additional analysis on project impacts on the regional water supply and the economic feasibility of the “enclosed facility” alternative. As a public health agency, CDPH’s review focused on identifying areas or omissions from the SEIR that might indicate a potential health risk to the community from the project as it is proposed. CDPH identified the following areas of concern.

a) As concluded in the DEIR (see excerpt in italics below) and restated in the SEIR:

DEIR Section 44.3.3.2 Operational Emissions Impacts: “Additionally, based on data in SCAQMD Proposed Rule 1133.2, an enclosed composting facility in which all the compost and resulting emissions are contained within a building and forcefully aerated during curing are estimated to reduce VOC and ammonia emissions by 80%. Even with an 80% emissions reduction, VOCs emissions are estimated to be 71 tons/year and would still exceed the significance threshold of 25 tons/year. Therefore, it is not technologically feasible to mitigate VOC emissions below the level of significance. Thus these composting off-gas emissions are considered to be significant and unmitigable.”

This conclusion appears to be based on the assumption that emissions would be reduced by 80% if operations were conducted in an enclosed facility. CDPH reviewed the South Coast Air Quality Management District (SCAQMD) Proposed Rule 1133.2, Technology Assessment, where it states the control effectiveness for VOC emissions in enclosed facilities using biofiltration is 90%. The 90% control effectiveness cited in the SCAQMD Technology Assessment is based on information provided in “numerous studies,” in addition to evaluations conducted at facilities utilizing biofiltration. Thus, it appears the effectiveness of an enclosed facility may have been underestimated in the DEIR.

If the Nursery Products LLC Hawes Composting operations were conducted in an enclosed facility using biofiltration, a 90% reduction in VOC emissions would correlate to 35 tons/year released to the air, compared to 357 tons/year with the current proposal. While 35 tons/year still exceeds the 25 ton/year threshold, it is still a considerably lower impact on air quality. The underestimated reduction of 80% to 71 tons/year is significant compared to 357 tons/year of VOC emissions. Air quality (VOCs in air) is linked to number of health-related issues, such as asthma, lung and other respiratory diseases, and heart disease. Thus, the long-term implications for the county and its residents from the degradation of air quality are issues that merit consideration.

- b) As previously commented on by CDPH in 2006, the DEIR did not estimate emissions of sulfur compounds, such as hydrogen sulfide (H₂S), carbon disulfide, and dimethyl sulfide, which are emitted from biosolids composting. The SCAQMD conducted sampling at the EKO biosolids composting facility in Chino (much smaller in scale compared to the proposed project) and estimated emission of sulfur compounds at 1.3 tons/year. Since the DEIR did not estimate or model emissions, potential exposures cannot be evaluated. Exposure to H₂S at low concentrations may cause headaches, upset stomach, irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics.
- c) A pathogen risk assessment was not conducted as part of the DEIR or the SEIR. A pathogen risk assessment is an evaluation of the airborne transport of pathogens from the facility and while in transport to the facility (uncovered trucks). In 2002, the National Research Council (NRC) of the National Academy of Sciences released a report concluding that the potential adverse human health impact from exposure to biosolids is uncertain and that there is a need for the Environmental Protection Agency (EPA) to update the scientific basis of Rule 503¹.

¹ In 1993, EPA established regulations (Code of Federal Regulations Title 40, Part 503— commonly referred to as Rule 503) governing composting and land application of biosolids. Rule 503 was implemented without an evaluation of the health risks from exposure to pathogens.

Ms. Carrie Hyke
Page 3
September 14, 2009

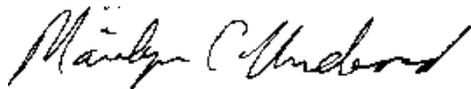
To summarize, in addition to VOCs, there are a number of other constituents not evaluated as part of the DEIR or the SEIR that will be emitted from the Nursery Products LLC Hawes project and impact air quality in the area. Given the limitations in knowledge on the potential health implications caused by many of these constituents, reducing the amount of exposure from airborne releases is a public health protective approach. As shown by the data, conducting composting operations in an enclosed facility with biofiltration would reduce the impacts on air quality and public health.

CDPH appreciates your consideration of these comments. If you have any questions, please do not hesitate to call Tracy Barreau at (510) 620-3670 or Marilyn Underwood, Ph.D., at (510) 620-3610.

Sincerely,

A handwritten signature in black ink, appearing to read "Tracy Barreau". The signature is fluid and cursive, with a long horizontal line extending to the right.

Tracy Barreau, REHS
Staff Environmental Scientist
Environmental Health Investigations Branch

A handwritten signature in black ink, appearing to read "Marilyn C. Underwood". The signature is cursive and somewhat stylized, with a long horizontal line extending to the right.

Marilyn C. Underwood, Ph.D
Acting Chief, Site Assessment Section
Environmental Health Investigations Branch

cc: Norman Diaz at dnormdiaz@gmail.com